

SCIENCE ***Sixth Grade***

LIFE SCIENCE STANDARDS

Interactions Between Living Things and Their Environment

The student will investigate how living things interact with one another and with nonliving elements of their environment.

Key	Reporting Category		WILD Activity
A	IL	Distinguish between commensalisms, parasitism, and mutualism.	Good Buddies, W91
D		Distinguish between predators and prey.	Create Your Own Food Web, FW70
A	IL	Recognize how animals and plants are interdependent.	Seed Need, p.W98 Kelp Help, p.AW181 Home Is Where the Forest Is, p.FW91
A	IL	Predict whether an organism can survive in a particular ecosystem.	Migration Headache, p.AW15
D		Interpret how humans impact ecosystems.	What Did Your Lunch Cost Wildlife, p.W68 What You Wear Is What They Were, p.W210 No Water Off a Duck's Back, p.W305 Migration Barriers, p.W308 Shrinking Habitat, p.W310 Noisy Neighbors, p.W317 Flip the Switch for Wildlife, p.W319 To Zone or Not to Zone, p.W321 Hazardous Links, Possible Solutions, p.W326 World Travelers, p.W330 Rare Bird Eggs for Sale, p.W335 Changing the Land, p.W345 Litter We Know, p.W434 Enviro-Ethics, p.W443 Migration Headache, p.AW15 What's in the Air?, p.AW136 Alice in Waterland, AW151 What's in the Water?, p.AW140 To Dam or Not to Dam, p.AW170 Dragonfly Pond, p.AW184 Home Is Where the Forest Is, p.FW91 Hidden Hazards, p.FW105 Home, Sweet Home, p.FW134 Council Consensus, p.FW143 Teaming Up for Birds, p.FW151 The Great Migration Challenge, p.FW164 Bird Hurdles, p.FW216 Just Ducky, p.FW225 Bird Friend or Foe?, p.FW256
TPI		Describe the niche and habitat of an organism within an ecosystem.	Which Niche?, p.W66 Career Critters, p.W371 Home, Sweet Home, p.FW134

KEY

I = Introduced D = Developing A = State Assessed M = Mastered

REPORTING CATEGORY

IL = Interaction & Environment FP = Food Production & Energy DA = Diversity & Adaptation
BC = Biological Change EU = Earth & Its Place in the Universe E = Energy

Note: "A" indicates the state curriculum (CRT) assessment only.
All the skills ("I"... "D"... "A"... "M") are addressed in the classroom assessment.

Food Production and Energy for Life

The student will study the basic parts of plants, investigate how plants produce food, and discover that plants and animals use food to sustain life.

D		Classify organisms as producers, consumers, or decomposers.	Owl Pellets, p.W100 Eco-Enrichers, p.W102 Create Your Own Food Web, p.FW70
A	FP	Identify how organisms obtain food for energy.	What's for Dinner?, p.W96 Create Your Own Food Web, p.FW70 Feeder Frenzy, p.FW128 Food for the Brood, p.FW212
A	FP	Classify organisms as producers, consumers, or decomposers in a food chain or food web.	Owl Pellets, p.W100 Create Your Own Food Web, p.FW70
D		Demonstrate interrelationships among organisms in a food chain or food web.	Food Chain Tag, p.FW66 Create Your Own Food Web, p.FW70 Micro Odyssey, AW49
A	FP	Infer the consequences of a change in the population size of an organism in a food chain or food web.	

Diversity and Adaptation Among Living Things

The student will understand that living things have characteristics that enable them to survive in their environment.

D		Explain how the relationship between the form and function of an organism is associated with survival in a given environment.	Who Fits Here?, p.W64 Bird Behavior Scavenger Hunt, p.FW84 Fill the Bill, p.FW171
A	DA	Identify adaptations that enhance the survival of organisms in an environment.	Fill the Bill, p.FW171 Bird Behavior Scavenger Hunt, p.FW84 Migratory Mapping, p.FW120 Habitat Match, p.FW260
A	DA	Determine which organisms are likely to survive in a particular environment.	Move Over Rover, p.W144
A	DA	Classify plants and animals according to their features.	Tracks!, p.W30 Fishy Who's Who, p.AW8 Feeder Frenzy, p.FW128 Fill the Bill, p.FW171

Biological Change

The student will understand that living things have changed over time.

A	BC	Analyze how fossils provide information about the past.	
A	BC	Differentiate between the relative age of fossils in a sedimentary rock diagram.	
I		Determine the geologic age of an object using a diagram or a time line.	
D		Identify additional lines of scientific evidence, other than fossils, that support the idea of change over time.	
A	BC	Select additional lines of scientific evidence, other than fossils, that illustrate change over time.	
D		Predict how a specific environmental change might affect the survival of a plant or animal species.	Migration Headache, p.AW15 Where Have All the Salmon Gone? , p.AW166 Hidden Hazards, p.FW105 Migratory Mapping, p.FW120 The Great Migration Challenge, p.FW164

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			Bird Hurdles, p.FW216 Just Ducky, p.FW225 Bird Friend or Foe?, p.FW256
D		Evaluate possible causes of extinction.	Here Today, Gone Tomorrow, p.W154 Where Have All the Salmon Gone? , p.AW166
A	BC	Identify factors that contribute to extinction.	Here Today, Gone Tomorrow, p.W154

EARTH SCIENCE STANDARDS

Earth and Its Place in the Universe

The student will investigate the structure of the universe.

D		Differentiate among the components of the universe.	
A	EU	Categorize the components of the universe (i.e., stars, planets, comets, asteroids, and meteors).	
A	EU	Differentiate between planets according to specific characteristics.	
D		Construct a model of the solar system.	
D		Illustrate the positions of the Earth, moon, and sun during solar and lunar eclipses.	
D		Use a model to explain how the tilt of the Earth and its revolution around the sun causes the seasons.	
A	EU	Distinguish between a day, month, and year based on the movements of the Earth, sun, and moon.	
A	EU	Differentiate between a solar and a lunar eclipse.	
A	EU	Select the diagram that reflects the Earth/sun relationship that accounts for the four seasons.	
D		Identify the pull of gravity as the force that holds the planets and their moons in orbit.	
A	EU	Identify the force that pulls objects toward the Earth.	
I		Relate tidal conditions with the position of the moon.	
A	EU	.Predict the type of tide produced by the different positions of the Earth and moon system.	
I		Make use of available resources (internet, library, interviews, etc.) to research careers associated with technology and space exploration.	

PHYSICAL SCIENCE STANDARDS

Energy

The student will investigate energy and its uses.

D		Recognize the basic parts of a wave.	
A	E	Identify the wavelength, frequency, and amplitude of a wave.	
D		Explain how the properties of sound are related to wavelength, frequency, and amplitude.	
A	E	Predict the direction of heat flow between objects.	
I		Explain the difference between the Fahrenheit and Celsius temperature scales.	

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D		Explain how magnets are involved in the production of electricity.	
D		Distinguish among heat, chemical, electrical, and mechanical energy.	
I		Understand the law of conservation of energy.	
A	E	Recognize a variety of energy transformations.	
A	E	Infer the impact of nuclear power on humans and the environment.	
D		Describe the electromagnetic spectrum.	
A	E	Select examples of refraction, reflection, and absorption of light.	
I		Compare incandescent and fluorescent light with respect to production and efficiency.	

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